IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

CARDIAQ VALVE TECHNOLOGIES, INC., Plaintiff, v. NEOVASC INC. and NEOVASC TIARA INC., Defendants.	Civil Action No. 1:14-cv-12405-ADB

MEMORANDUM OF LAW IN SUPPORT OF
DEFENDANTS NEOVASC INC.'S AND NEOVASC TIARA INC.'S MOTION FOR
PARTIAL SUMMARY JUDGMENT

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INTRODUCTION

Defendants ("Neovasc") respectfully request partial summary judgment as to Plaintiff CardiAQ's claims for fraud (under Count 4 and Count 6) and its claim for correction of patent inventorship (Count 1).

CardiAQ and Neovasc are competitors. Both develop prosthetic devices to replace diseased mitral valves in human hearts (specifically, transcatheter mitral replacement valve devices sometimes known as TMVIs).

REDACTED -- SUBJECT TO MOTION TO SEAL AND IMPOUND the parties had a roughly nine-month commercial relationship – from June 2009 until March 2010 – in which Neovasc provided CardiAQ animal tissue and related services in connection with CardiAQ's TMVI prototype devices. **REDACTED -- SUBJECT TO MOTION TO SEAL AND IMPOUND**

The CardiAQ-Neovasc business relationship was conducted pursuant to a non-disclosure agreement (the NDA). The NDA is an integrated writing that does not contain any provision prohibiting Neovasc from competing with CardiAQ in any way. Nor did Neovasc ever agree not to compete with CardiAQ in some other context. Rather, as CardiAQ concedes,

REDACTED -- SUBJECT TO MOTION TO SEAL AND IMPOUND In fact, the NDA contemplates that Neovasc might develop its own intellectual property relating to TMVIs: it expressly permitted Neovasc to disclose and use for its own benefit any TMVI or related information Neovasc independently developed, as long as it was "without resort to [CardiAQ's] disclosure" under the NDA.

Despite these facts, which are not subject to any material dispute, CardiAQ alleges that Neovasc committed fraud by (1) identifying its products without identifying a TMVI device (which, at the time, Neovasc did not have) and referring to its customers as "industry partners" in marketing materials sent to CardiAQ before the NDA was signed; and (2) failing to disclose or concealing its intent to compete with CardiAQ with respect to the development of a TMVI device. Second Amended Complaint ("SAC") ¶¶ 51-59. CardiAQ is incapable of presenting

any evidence sufficient to create an issue for trial on its fraud claim and Neovasc is entitled to judgment as a matter of law.

First, there is no evidence that Neovasc ever misrepresented anything to CardiAQ. Neovasc's identification of its products in its marketing materials was accurate when made; there was nothing false or misleading about it. Similarly, references to Neovasc's customers as "industry partners" in marketing materials are not sufficient to constitute fraudulent misrepresentations. These references are too vague to support a fraud claim as a matter of law and could not have been reasonably relied on by CardiAQ as an implicit promise not to compete in any event. Second, Neovasc never had a duty to disclose its intention to develop a competing TMVI device to CardiAQ. Neovasc had no such intention at the time the parties entered the NDA. Once the parties' commercial relationship began, the NDA imposed no restriction on Neovasc's right to compete with CardiAQ and expressly permitted Neovasc to independently develop its own TMVI technology so long as it did not resort to CardiAQ's disclosures under the NDA. The parties dealt with one another at arms' length. Under these circumstances, no duty to disclose exists.

Accordingly, CardiAQ's fraud claim and the portion of CardiAQ's claim for unfair and deceptive trade practices (Mass. Gen. Laws. C.93A § 11) based on its fraud claim fails as a matter of law. Neovasc is entitled to summary judgment on CardiAQ's fourth claim for relief (for fraud) and on the portion of CardiAQ's sixth claim (C.93A) for relief based on fraud.

As to inventorship, CardiAQ claims that it invented Neovasc's '964 patent even though CardiAQ provided no required corroborating evidence to its own self-serving testimony and concedes it never specifically communicated any significant particular solution regarding the method of anchoring. In lieu of communicating a specific inventive contribution, CardiAQ instead claims that Neovasc saw CardiAQ's devices and information about them, and thereby inferred or deduced the invention from that material.

Two well established rules defeat CardiAQ's joint inventorship claim. First, CardiAQ has the burden of proving, by clear and convincing evidence, that it communicated to Neovasc

any significant "particular solution" of the '964 patent. CardiAQ's argument that Neovasc looked at its device and information to infer or deduce its invention is insufficient. CardiAQ's inventorship claim fails on that basis alone. Second, and separately, the prior publication rule defeats CardiAQ's claim. If a purported joint inventor published the information that allegedly comprises the co-invention before the relevant patent application was filed, that act of publication eliminates any joint inventorship claim based on anything contained in the publication. CardiAQ published the same devices and information that it alleges amount to co-inventorship before the date when Neovasc filed the relevant application for the '964 Patent. Standing alone, this fact also defeats CardiAQ's inventorship claim as a matter of law.

BACKGROUND

I. FACTS RELATING TO THE FRAUD ALLEGATIONS

A. The Parties' Relationship Began on June 4, 2009

The parties' short-lived relationship began with an email. On June 4, 2009, Neovasc sales executive Brian McPherson emailed CardiAQ, introducing Neovasc. SF ¶ 1. Mr. McPherson's email contained a 15-page slide set.

The slides contained open-ended statements that Neovasc was involved in product development as well as customer service, had one facility with approximately 40 employees, and had personnel with years of experience in heart valve development and manufacture. SF ¶ 2. Those statements included that Neovasc's "customers are typically industry partners," that Neovasc prides itself on providing service to its "partners," and "work[s] closely with partners." SF ¶ 3. The slides also identified Neovasc's then "core products," "implantable pericardial tissue technologies," and "Reducer™ Stent for refractory angina." SF ¶ 4. Neovasc made no statement limiting its future business activities, its right to provide concurrent services to competing customers or its right to engage in any other competitive activities. SF ¶¶ 2-5

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B. The Parties Exchange NDAs

CardiAQ's Brent Ratz responded the same day. The parties agreed to discuss a potential business relationship wherein Neovasc might supply tissue and provide other services. Mr. Ratz provided a draft nondisclosure agreement (NDA) that prohibited use or disclosure of the other party's Proprietary Information unless that information was in the public domain, the receiving party knew the information prior to receiving it from the disclosing party, or the receiving party received the same information from someone else. SF ¶ 6.

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Neovasc Inc.'s NDA was integrated and contained similar restrictions on use or disclosure of confidential information. SF ¶ 8. It also permitted the receiving party to develop competing technology on its own, "to the extent that [the] information: . . . is independently developed by Recipient without resort to Disclosers disclosure [sic]." SF ¶ 9.

Neither the unsigned CardiAQ draft NDA nor the executed Neovasc NDA contained any term (1) barring competition, either during the relationship or after; (2) requiring Neovasc to notify CardiAQ if it were to contemplate competitive activity; (3) providing for exclusive dealing; (4) barring Neovasc from providing services to CardiAQ competitors; (5) requiring Neovasc to segregate employees from specific projects or customers; (6) giving CardiAQ ownership of any intellectual property developed by Neovasc; (7) giving CardiAQ any right of first opportunity, favorable licensing, or other control over independent Neovasc initiatives; or (8) requiring Neovasc to notify CardiAQ if it were acquired by a competitor. SF ¶ 10.

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C. The Parties' Short-Lived Business Relationship

Between June 2009 and March 2010, Neovasc provided CardiAQ animal tissue and related services for CardiAQ's TMVI device. SF ¶ 14.

REDACTED -- SUBJECT TO MOTION TO SEAL AND IMPOUND In conjunction with Neovasc's services, CardiAQ disclosed information to Neovasc that CardiAQ alleges constituted trade secrets. SF ¶ 16.

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D. Neovasc's Decision to Consider its Own Mitral Valve Design

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While CardiAQ's complaint alleges otherwise, there is no evidence that Neovasc began planning any competitive activities, including its own TMVI device, SF ¶ 22.

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By then, CardiAQ had not been a customer for more than a year, and thus Neovasc did not send a notice to CardiAQ. SF ¶ 25.

II. FACTS RELATING TO THE INVENTORSHIP ALLEGATIONS

On October 15, 2010, Neovasc filed a patent application that later issued as the '964 patent. The '964 Patent is directed to a method of anchoring a valve into the heart. SF ¶ 26. Claim 1 of the '964 Patent requires "anchoring [a] first trigonal anchoring tab against a first fibrous trigone on a first side of an anterior leaflet of the mitral valve." SF ¶ 27. The claim also requires that the "trigonal anchoring tab [be] disposed on an anterior portion of the ventricular skirt." SF ¶ 28. All claims depend on Claim 1. SF ¶ 29. Thus, every claim of the '964 Patent

requires a component, called a "trigonal anchoring tab," in a particular location on the device, that must be anchored onto a part of the human heart called the "fibrous trigone." SF ¶ 30. It is on this step that CardiAQ has focused its inventorship claims.

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CardiAQ admitted in discovery responses, that CardiAQ never mentioned anchoring on a fibrous trigone to Neovasc, or even fibrous trigones in general. SF ¶¶ 32-38.

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ARGUMENT

I. CARDIAQ'S FRAUD CLAIM FAILS AS A MATTER OF LAW

A. The Alleged Misrepresentations Are True And Too Vague To Be Actionable

There is no evidence that Neovasc ever misrepresented anything to CardiAQ. "To sustain a claim of misrepresentation, a plaintiff must show a false statement of a material fact made to induce the plaintiff to act, together with reliance on the false statement by the plaintiff to the plaintiff's detriment." *Boyle v. Douglas Dynamics, LLC*, 292 F. Supp. 2d 198, 218 (D. Mass. 2003), *aff'd*, 2003 U.S. Dist. Lexis 20917 (D. Mass Aug. 29, 2003) (internal citation omitted). In this case, CardiAQ purports to rely on two alleged misrepresentations in marketing slides Neovasc sent to CardiAQ before the NDA was signed: (1) the identification of its products (because they did not include a TMVI device), and (2) several references to its customers as "industry partners." SAC ¶¶ 52-54. Neither alleged misrepresentation is sufficient to support CardiAQ's fraud claim.

The representation that Neovasc's products were the Reducer Stent and pericardial tissue products (SAC ¶ 52) was true, and is therefore not actionable. Neovasc never discussed, much less represented, that these were the only products it would ever develop. At the time the representation was made, Neovasc did not have a TMVI product, was not working to develop such a product and had no intention of developing such a product in the future. There is no contrary evidence sufficient to support an issue for trial.

Likewise, references to Neovasc's customers as partners in marketing materials are too general to be actionable as fraudulent misrepresentations. *See Boyle*, 292 F. Supp. 2d at 214-16; *Hinchey v. NYNEX Corp.*, 979 F. Supp. 40, 44 (D. Mass 1997) (finding defendant's statement that plaintiff was a valued employee in good standing too general); *Saxon Theatre Corp. of Boston v. Sage*, 347 Mass. 662, 666-67, 200 N.E.2d 241 (1964) (plaintiff's statement of intent to have a long-term lease too general).

Boyle, for example, is directly on point. In *Boyle*, the defendant was accused of misrepresenting to the plaintiff that its business with the plaintiff would "remain the same," and that the transition in connection with the plaintiff's purchase of a related business, and entry into a distribution agreement with defendant, would be "seamless." The plaintiff claimed that the defendant "knew that there was to be a material change to its distribution network which would have an enormous impact on [the plaintiff]. Instead of either telling [the plaintiff] about the upcoming appointment or telling him that [the defendant] could not comment on its network or future developments in the network, [the defendant] told [the plaintiff] that things would be the same." The *Boyle* court held that these statements were too vague to be actionable:

> In the instant case, it is too far a stretch of the imagination to conclude from [the defendant's] alleged statements that it was agreeing to give up its fundamental right to establish a distribution network as it saw fit and was committing itself not to add any additional distributors, including Madigan. Nothing in [the defendant's] statements even mentions distributors, Madigan or the distribution network. Plaintiffs admit that before becoming a distributor, they did not have any discussions with [the defendant] regarding whether [the defendant] intended to appoint new distributors. Similarly, it is uncontroverted that the plaintiffs never

> discussed Madigan's status with [the defendant] before [the plaintiff] became a distributor. The statements cited by plaintiffs are too general for them to have reasonably relied on them to conclude that Madigan would not be appointed a full-line distributor.

Id. at 214-15.

The *Boyle* court's analysis applies with even greater force to the facts here. As in *Boyle*, in this case, it is simply too far a stretch of imagination to conclude that the identification of Neovasc's products, or references to Neovasc customers as "partners," in marketing materials were implicit promises by Neovasc to give up its fundamental right to compete with CardiAQ.[1] The parties never discussed competition, an agreement not to compete, or any other restriction on Neovasc's ability to develop its own TMVI device.

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Moreover, the NDA itself allowed Neovasc to develop its own intellectual property relating to TMVIs during the course of the parties' commercial relationship, provided that it did so independently and without resort to CardiAQ's disclosures under the NDA.

The suggestion that, under these circumstances, Neovasc implicitly promised that it would not compete in connection with the development of a competing TMVI, and that CardiAQ reasonably relied on such an implicit promise, fails as a matter of law. Neovasc's alleged misrepresentations are too vague to be actionable.

[1] To the extent CardiAQ has alleged that merely using the word "partner" creates new legal obligations or creates a fiduciary relationship, SAC 52, that is incorrect as a matter of law. Even if both parties call each other "partners," saying that word has no legal effect and by itself creates no special obligations. *E.g.*, *Gemini Investors, Inc. v. Ches-Mont Disposal, LLC*, 629 F. Supp. 2d 163, 167 (D. Mass. 2009) (no partnership even though "the parties frequently referred to themselves as such"); *Martin v. Stone*, 332 Mass. 540, 546, 126 N.E.2d 196 (1955) (absent indicia of a partnership, "It is not enough that the parties referred to each other as partners."); *Cardullo v. Landau*, 329 Mass. 5, 9, 105 N.E.2d 843 (1952) (same).

B. Neovasc Had No Duty To Disclose Its Intent To Compete With CardiAQ

Neovasc's alleged failure to disclose its intention to compete with CardiAQ also fails as a matter of law. In the absence of a specific duty to disclose, there is no liability for an omission of information. *Boyle*, 292 F. Supp. at 215 (internal citation omitted). Neovasc never had a duty to disclose its intention to develop a competing TMVI device to CardiAQ, and is therefore entitled to summary judgment.

Again, *Boyle* is directly on point. 292 F. Supp. at 215. In *Boyle*, the court held that there was no independent reason obligating the defendant to disclose its plans for its distribution network to plaintiff: the representations that the plaintiff's business with defendant would remain the same were too vague to be actionable, there had been no substantive discussion of the defendant's distribution network that required a fuller disclosure of the defendant's plans, and the arms-length nature of the parties' relationship did not give rise to any affirmative duty to disclose. *Id.*

Here as in *Boyle*, there is no evidence of any circumstance that would obligate Neovasc to disclose its intent to compete with CardiAQ. The NDA imposed no restriction on Neovasc's right to compete with CardiAQ. To the contrary, it expressly permitted Neovasc to independently develop its own TMVI technology, without imposing any obligation to disclose. Nor did the parties ever discuss competition, or any limitation on Neovasc's right to compete, before or after entering the NDA – in other words, CardiAQ cannot rely on any partial disclosure that was allegedly deceptive unless the whole story was told. The parties dealt at arms' length. Under these circumstances, no duty to disclose exists. *Id.; see also Urman v. S. Boston Sav. Bank*, 424 Mass. 165, 168, 674 N.E.2d 1078, 1081 (1997) (affirming summary judgment as defendant had no fiduciary or other duty to disclose information about contamination); *Nei v. Burley*, 388 Mass. 307, 310-11, 446 N.E.2d 674 (1983) (sellers and brokers did not have a duty to disclose every latent defect known to them); *Rohm & Haas Elec. Materials, LLC v. Elec. Circuits Supplies, Inc.*, 759 F. Supp. 2d 110, 121 (D. Mass. 2010) (no fraud where, during negotiation, party silently removed a non-compete from agreement); *Greenery Rehab. Grp. v.*

Antaramian, 36 Mass. App. Ct. 73, 77-78, 628 N.E.2d 1291, 1294 (1994) (no fraud during negotiations for the sale of a building where defendant remained silent where it was allegedly aware of signs that a tenant might soon default on its lease, because the buyers made no relevant inquiries or information requests, and they did not ask for a lease guarantee).

II. CARDIAQ'S CHAPTER 93A FRAUD CLAIM FAILS FOR THE SAME REASONS

Nothing distinguishes CardiAQ's fraud allegations under Chapter 93A from the common law fraud cause of action; Count Six merely repeats and incorporates prior allegations. *See* SAC ¶¶ 69-73. Thus, to the extent the cause of action is premised on fraud rather than CardiAQ's distinct allegations of trade secret misuse, the claim fails for the same reasons. With respect to CardiAQ's allegations from before the contract was even executed, there can be no Chapter 93A violation where the defendant was unaware of the fact that was allegedly not disclosed. *See Fernandes v. Rodrigue*, 38 Mass. App. Ct. 926, 928, 646 N.E.2d 414 (1995) (stating rule). Thus, no Chapter 93A claim regarding Neovasc's June 2009 contract formation with CardiAQ as a matter of law, because CardiAQ admits that the parties did not discuss competition, and because Neovasc was not then aware of its not-yet formed idea to explore a competitive device and thus cannot be charged with an actionable omission.

As to the allegations after the parties entered into the NDA, there is no authority for the proposition that Neovasc's subsequent decision to engage in competitive activities is actionable when (1) such post-contract facts have no connection to any continuing representations, or any connection to the subject matter of the contract; (2) CardiAQ gave no indication that competition was an issue of concern; and (3) CardiAQ was not a neophyte or an innocent, but rather the designer that was hiring Neovasc as a vendor. For these reasons, Neovasc is entitled to partial summary judgment as to the fraud-based allegations of CardiAQ's ch. 93A Section 11 cause of action.

III. CARDIAQ'S INVENTORSHIP CLAIM (35 U.S.C. § 256) FAILS

Neovasc is also entitled to summary judgment on CardiAQ's correction of inventorship cause of action, under which CardiAQ contends that Dr. Quadri and Mr. Ratz should be deemed

co-inventors of Neovasc's '964 Patent. The Court can decide the motion without delving into the parties' competing technology disputes. Even if one assumes that everything CardiAQ says about its device design is true, two established inventorship principles defeat the claim as a matter of law: (1) the specific communication requirement; and (2) the prior-publication rule.

A. Legal Standard: 35 U.S.C. § 256

"Inventorship is a question of law . . . based on underlying questions of fact." *Gemstar-TV Guide Int'l, Inc. v. Int'l Trade Com'n*, 383 F.3d 1352, 1360 (Fed. Cir. 2004). "[A]n action for correction of inventorship under § 256, standing alone, is an equitable claim to which no right to a jury trial attaches." *Shum v. Intel Corp.*, 499 F.3d 1272, 1277 (Fed. Cir. 2007). Courts consider at summary judgment whether sufficient evidence exists to meet the "clear and convincing evidence" standard. *E.g.*, *Univ. of Utah v. Max-Planck-Gesellschaft Zur Foerderung Der Wissenschaften e.V.*, No. 11-10484-PBS, 2015 U.S. Dist. LEXIS 130333, *13-17 (D. Mass. Sept. 28, 2015). In a section 256 case, "the inventors as named in an issued patent are presumed to be correct." *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1358 (Fed. Cir. 2004). Section 256 claimants "must prove their contribution to the conception of the invention with more than their own testimony[.]" *Gemstar*, 383 F.3d at 1382. "Reliable corroboration preferably comes in the form of records made contemporaneously with the inventive process." *Id.*

Two simple rules defeat CardiAQ's claim. The first is the specific communication requirement. Section 256 claims fail where a claimant cannot demonstrate specific communication of a particular significant contribution to the invention, as distinct from participating in general discussions about the subject matter. *See Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 670 F.3d 1171, 1180-84 (Fed. Cir. 2012) (affirming failure of inventorship claim for, among other things, "lack of communication" regarding specific inventive aspects); *see also Symantec Corp. v. Computer Assocs. Int'l*, 522 F.3d 1279, 1296 (Fed. Cir. 2008); *Eli Lilly*, 376 F.3d at 1363-64; *Hess v. Advanced Cardiovascular Sys., Inc.*, 106

F.3d 976, 980–81 (Fed. Cir. 1997).[2] An invention is "a particular solution to a problem at hand;" conception of an invention means "a specific, settled idea" of that solution. *Burroughs Wellcome Co. v. Barr Labs., Inc.*, 40 F.3d 1223, 1228 (Fed. Cir. 1994). A "bare idea" is not sufficient. *Id.* Each co-inventor's collaborative contribution must be "not insignificant in quality, when that contribution is measured against the dimension of the full invention." *Eli Lilly & Co.*, 376 F.3d at 1359. Insignificant contributions include those that "merely explain what was then state of the art." *Id.* (internal quotation omitted).

The second is the prior publication rule. If the plaintiff publishes the claimed inventive contribution before the defendant files the patent application at issue, the plaintiff cannot claim joint inventorship because the publication renders the claimed contribution mere prior art. *See Univ. of Utah*, 2015 U.S. Dist. LEXIS 130333, *19-21 (explaining and applying rule on summary judgment); *Eli Lilly*, 376 F.3d at 1362 ("A contribution of information in the prior art cannot give rise to joint inventorship because it is not a contribution to conception."); *Sewall v. Walters*, 21 F.3d 411, 416 (Fed. Cir. 1994) (no joint inventorship where named inventor built from method disclosed by would-be joint inventor in prior patent).

B. CardiAQ's Section 256 Claim Fails

1. CardiAQ's Original Argument And Its Alternative Argument

CardiAQ claims that its cofounders Dr. Quadri and Mr. Ratz are joint inventors of Neovasc's '964 Patent. SAC ¶¶ 13, 36–37. Neovasc's '964 Patent describes a method of anchoring a valve into a patient's heart, and includes deliberate, specific anchoring of a "trigonal anchoring tab" to a specific part of the human heart called a "fibrous trigone." SF ¶ 27. CardiAQ originally alleged that it invented things including anchoring on the fibrous trigones "either by themselves or in collaboration with" Neovasc. SAC ¶¶ 13(b), 36. But discovery

[2] Outside the context of co-employees working for the same company, Neovasc counsel is unaware of any case finding joint inventorship absent clear and convincing evidence of a specific communication of an inventive contribution by the would-be co-inventor to the other inventor(s).

showed that CardiAQ never mentioned such a concept to Neovasc, and its internal records never mention fibrous trigones. CardiAQ then retreated to a backup argument premised on indirect inferences or deduction.

CardiAQ now argues that Neovasc could have inferred or speculated from seeing CardiAQ's devices and information about them in late 2009 or early 2010 that, if implanted in a human by a hypothetical surgeon (no surgeries had then been done) one of CardiAQ's anchors might touch a fibrous trigone without being intentionally placed on the trigone. CardiAQ thus argues, as an alternative in the absence of actual communication, that its *device* visually taught Neovasc the specific *method of anchoring* to the fibrous trigones claimed in Neovasc's patent.[3] That is, CardiAQ now posits that its device corroborates its alleged contribution. But even if one treats CardiAQ's fallback argument as true, its inventorship claim fails as a matter of law.

2. CardiAQ Did Not Communicate A Specific Method of Anchoring

CardiAQ's claim fails first under the specific communication requirement. CardiAQ admits that it never communicated to Neovasc any specific method of anchoring found in the '964 Patent claims. Because CardiAQ never suggested the specific idea of placing an anchor deliberately on a fibrous trigone, it cannot have co-invented that feature. The idea entitling a person to joint inventorship "must be definite and permanent in the sense that it involves a specific approach to the particular problem at hand." *Burroughs*, 40 F.3d at 1229-30; *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 776 F.3d 837, 846-47 (Fed. Cir. 2015) (*Bard II*) (no joint inventorship where there was no evidence that alleged omitted inventor either recognized or appreciated the critical nature of the internodal distance that was the subject of the invention or communicated that key requirement to the patentee).

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This makes no difference. However broad or narrow CardiAQ's claim, CardiAQ cannot get past the two requirements at issue on this motion.

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The ’964 Patent method requires anchoring against a “fibrous trigone.”

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CardiAQ also never mentioned this specific anchoring method or fibrous trigones in any writing. SF ¶ 38.

CardiAQ has failed to put forward any corroborating evidence other than self-serving testimony that it invented intentional placement of an anchor on a fibrous trigone, or more generally that the “fixation method” allegedly inherent in its device somehow contributed significantly to the invention of the ’964 patent. It has nothing showing that CardiAQ taught Neovasc any significant and specific solution claimed in the ’964 Patent, including deliberate anchoring on a fibrous trigone. Self-serving testimony is insufficient. *See Ethicon v. U.S. Surgical Corp.*, 135 F.3d 1456, 1461 (Fed. Cir. 1998) (testimony by a would-be joint inventor cannot alone meet the clear and convincing standard) (citation omitted).

In the absence of specific communication or even a single email or document that mentions “fibrous trigones,” CardiAQ’s alternative argument that it contributed to Neovasc’s inventive method by showing Neovasc CardiAQ’s device also fails because showing something and claiming that ideas can be deduced or inferred from viewing it is not sufficient for joint inventorship under the specific communication requirement. *See Bard*, 670 F.3d at 1180-84 (showing sample alleged to convey physical features was insufficient evidence of contribution to

invention as a matter of law where the features' key aspect was not itself verbally conveyed); *Gemstar*, 383 F.3d at 1382-83 (two documents could not show joint inventorship because they "did not explicitly state what subject matter [was] contributed," did not identify the claimed contribution, and testimony could not "fill in these gaps.").

3. The Prior-Publication Rule Defeats CardiAQ's Alternative Argument

The prior-publication rule also defeats CardiAQ's claim. Because this black-letter rule defeats an inventorship claim regardless what technical arguments are asserted, it makes no difference whether CardiAQ's fallback argument is true or false, and the Court need not resolve that dispute. The simple rule is that once the information is published, whatever it is, it cannot support an inventorship claim. "It is well-settled that a 'contribution of information in the prior art cannot give rise to joint inventorship because it is not a contribution to conception.'" *Univ. of Utah*, 2015 U.S. Dist. LEXIS 130333, *20 (quoting *Eli Lilly*, 376 F.3d at 1362) (no joint inventorship where information conveyed was shortly later "assimilated into the storehouse of what comprises ordinary skill in the art."); *Sewall*, 21 F.3d at 416 (no joint inventorship where contribution already disclosed by would-be joint inventor in prior patent).

CardiAQ alleges that the devices and information about them it shared with Neovasc informed Neovasc's invention through inference or deduction. The priority date for each claim in Neovasc's '964 Patent is no earlier than October 15, 2010. Because there is no material dispute that CardiAQ published all of the information at issue before October 15, 2010, an inventorship claim is precluded as a matter of law.

First, on April 1, 2010 CardiAQ disclosed Revision C of its device in a patent application, with detailed depictions of the device and its anchors. SF ¶ 39.

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Earlier, on September 25, 2009, CardiAQ disclosed an image of Revision C at an industry conference,

touting its "secure anchoring," "impact on subvalvular apparatus, and ability to seal to MV Annulus." SF ¶ 41.

CardiAQ also disclosed its subsequent Revision E device before October 15, 2010. On September 22, 2010 at an industry conference, CardiAQ's Dr. Quadri disclosed images of Revision E, along with a computer design drawing and explanation of the "proprietary system for anchoring to [mitral valve] annulus." SF ¶ 42.

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This is the same information CardiAQ claims led Neovasc to infer or deduce the invention in the '964 Patent.

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Neovasc denies that CardiAQ's devices have anything to do with Neovasc's invention. But that dispute is irrelevant here. If CardiAQ were correct about what can be inferred or deduced from seeing its information, the prior-publication rule defeats its inventorship claims because CardiAQ published this information before October 15, 2010. Thus, if its devices and images really teach, as CardiAQ contends, anchoring on the fibrous trigones and CardiAQ's fixation mechanism, these disclosures defeat the joint inventorship claim as a matter of law.

The prior-publication rule gores CardiAQ's own ox. CardiAQ attempted to make up for the absence of evidence it ever mentioned the fibrous trigones or trigonal anchoring with a

backstop argument that its devices actually cause one to infer or deduce the things in Neovasc's '964 Patent (an assertion which, again, does not satisfy the specific communication rule). This kitchen-sink attempt to "go broad" is defeated by the prior publication of this very information. There is no doubt that CardiAQ has contended that this publicly-disclosed information allegedly caused Neovasc to deduce Neovasc's patented inventions, thus constituting its failed effort to meet the specific communication requirement.

This effort to claim that Neovasc's inventions are all somehow deducible from CardiAQ's devices runs directly into the prior-publication rule. CardiAQ publically disclosed and "assimilated to the storehouse of what is known in the art" anything CardiAQ claims its devices taught to Neovasc. *See Univ. of Utah*, 2015 U.S. Dist. LEXIS 130333, *19-21 (granting summary judgment in part because of prior publication).

In sum, CardiAQ cannot point to any corroborating evidence of a significant contribution to the '964 Patent that it communicated to Neovasc, and that it did not also publish before Neovasc's October 15, 2010 patent application. CardiAQ thus cannot possibly demonstrate "clear and convincing evidence" of a "significant contribution" of a "definite and permanent . . . specific approach to the particular problem at hand." The section 256 claim fails as a matter of law. *See Univ. of Utah*, 2015 U.S. Dist. LEXIS 130333, *19-30; *Burroughs*, 40 F.3d at 1229-30; *Gemstar*, 383 F.3d at 1382-83; *Bard*, 670 F.3d at 1180-84; *Symantec Corp.*, 522 F.3d at 1296; *Eli Lilly*, 376 F.3d at 1363-64; *Hess*, 106 F.3d at 980–81; *Bard II*, 776 F.3d at 844-47.

CONCLUSION

For these reasons, Neovasc respectfully requests partial summary judgment.

Dated: February 1, 2016

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Charles T. Graves, hereby certify that on February 1, 2016 the foregoing document was filed through the ECF system and will be sent electronically to the registered participants as identified on the Notice of Electronic Filing.

/s/ Charles T. Graves
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